

SOI SP7T + SP7T Switch with MIPI Antenna Switching

Preliminary Technical Data

Features

- ☑ CMOS SOI SP7T + SP7T switch from 100MHz to 2.69GHz.
- Designed for Antenna Switch Applications up to 36dBm.
- Integrated MIPI decoder with pin configurable default USID.
- ☑ ESD protection on all ports including ESD protection between MIPI controller and RF ports.
- Very Low Insertion Loss across all bands.
- ☑ Single supply with 2.3V to 4.8V operating range.
- ☑ No external capacitors required if no DC applied on RF lines.
- ☑ Small die for flip-chip assembly.
- ☑ Minimum Pitch 150µm.
- ☑ RohS compliant.

Description

The FE2E3601 is a CMOS SOI SP7T + SP7T switch designed for Antenna switch applications. It integrates a decoder compliant with the MIPI standard and the default USID is pin configurable allowing two instances of this device to be identified.

The switch runs from a single supply with a large operating range from 2.3V up to 4.8V. External DC blocking capacitors are not required on the RF ports unless there is a DC voltage externally applied to the ports.

The switch is fabricated using a high performance CMOS

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FUNCTIONAL DIAGRAM ANT2 ANT1 RX1 RX14 RX2 RX13 RX3 RX12 RX4 RX11 RX5 **RX10** RX6 RX9 RX7 RX8 **DECODER**

SOI process optimized for RF front-end applications. It delivers low loss across all the 4G bands, enabling high sensitivity and high linearity receive paths.

The FE2E3601 integrates ESD protection on all ports but also integrates ESD protection between the RF ports and the MIPI controller to support high reliability manufacturing.

The die is available in die form for flip-chip assembly and will be RoHS compliant to EU Directive 2002/95/EC.

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Further Information

Please contact sales@ferfics.com

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